

AMENDMENTS TO THE CLAIMS

1. (previously presented) A burner assembly, comprising:
a duct;
a burner disposed within the duct, the burner including a gas manifold and first and second baffles extending therefrom and defining a combustion chamber; and
a protective chamber disposed within the duct and including a profile opening adapted to receive a flame from the burner, the protective chamber being downstream relative to, and separated and spaced away from, the burner, the protective chamber including a face plate and side panels that are disposed perpendicular to the face plate, the face plate being perpendicular to a longitudinal axis of the duct.
2. (original) The burner assembly of claim 1, wherein the first and second baffles each include a plurality of apertures.
3. (original) The burner assembly of claim 1, wherein protective chamber includes imperforate walls.
4. (original) The burner assembly of claim 1, wherein the combustion chamber is wedged shaped.
- 5-6. (canceled).
7. (previously presented) The burner assembly of claim 1, further including first and second panels slidably mounted to the face plate.
8. (original) The burner assembly of claim 1, wherein the burner is adapted to produce a flame extending past the baffles by a length α , and wherein the protective chamber extends past the first and second baffles by a distance greater than α .

9. (original) The burner assembly of claim 1, wherein the face plate includes a top, a bottom, and first and second sides defining the profile opening, the burner being disposed on an upstream side of the profile opening, the protective chamber sides being disposed on a downstream side of the profile opening.

10. (original) The burner assembly of claim 9, wherein the face plate top and bottom are spaced from the burner by a distance Δ , and the face plate first and second sides are spaced from the burner by a distance γ , the distances Δ and γ being fixed.

11. (original) The burner assembly of claim 1, wherein the protective chamber and duct define first and second plenums flanking the protective chamber.

12 – 15. (canceled).

16. (previously presented) A burner assembly, comprising:
an air duct adapted to direct heated air and products of combustion to a space to be heated;
a gas supply disposed within the air duct;
an ignition means proximate the gas supply;
a combustion chamber downstream of the gas supply;
a protective chamber downstream of the combustion chamber, the protective chamber including a profile opening, the protective chamber being separate and spaced away from the combustion chamber, the protective chamber is formed by a face plate, first and second sides depending from the face plate, and a top and bottom of the duct; and
first and second air plenums flanking the protective chamber.

17. (original) The burner assembly of claim 16, wherein the combustion chamber is formed by a gas manifold and first and second baffles extending from the gas manifold, the first and second baffles including a plurality of apertures, combustion air for the combustion chamber entering through the plurality of baffle apertures.

18. (canceled).

19. (currently amended) The burner assembly of claim 16 ~~18~~, further including first and second slidable panels mounted to the face plate.

20. (original) The burner assembly of claim 17, further including gaps between the profile opening and the baffles, the dimensions of the gaps being predetermined.